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Date: January 22, 2004

Sonia V. McVean  
Sonia V. McVean

**PATENT**  
50626.53

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: Chun Ho FAN et al. Serial No.: 10/643,961 Filing Date: August 20, 2003 For: IMPROVED BALL GRID ARRAY PACKAGE AND PROCESS FOR MANUFACTURING SAME	Art Unit: 2812 Examiner: Not Assigned
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**COMMENTARY RE INFORMATION DISCLOSURE STATEMENT**

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SEP 29 2004

Dear Sir:

In accordance with 37 CFR §1.56, and in recognition of their duty to disclose to the United States Patent and Trademark Office relevant information known to be material to patentability, Applicants herewith submit a copy of the prior art 1-20 listed on the attached Information Disclosure Statement (Form PTO-1449). Applicants did not submit a copy of the prior art 21-24 as they are U.S. Applications currently pending. The statement is not a representation that all of the information cited is necessarily effective as prior art against the application.

U.S. Application No. 10/643,961  
January 22, 2004  
Page 2 of 2

Applicants respectfully request that the disclosed reference be made of record in the subject application.

Respectfully submitted,

Date: January 22, 2004



Attorneys for Applicant(s)

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Signature

PTO/SB/08A (04-03)

Substitute for form 1449/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (Use as many sheets as necessary)		Application Number	10/643,981
		Filing Date	August 20, 2003
		First Named Inventor	Chun Ho FAN
		Art Unit	2812
		Examiner Name	
Sheet 1 of 2	Attorney Docket Number	50626.53	

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM -YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	US-2001/0015492 A1	08/2001	Akram et al.	
	2	US 2002/0006718 A1	01/2002	Distefano	
	3	US-2002/0185734 A1	12/2002	Zhao et al.	
	4	2003/0034569 A1	02/2003	Caletka et al.	
	5	5,172,213	12/1992	Zimmerman	
	6	5,311,060	05/1994	Rostoker et al.	
	7	5,339,216	08/1994	Lin et al.	
	8	5,493,153	02/1996	Arikawa et al.	
	9	5,610,442	03/1997	Schneider et al.	
	10	5,639,694	06/1997	Diffenderfer et al.	
	11	5,650,663	07/1997	Parthasarathi	
	12	5,679,978	10/1997	Kawahara et al.	
	13	5,705,851	01/1998	Mostafazadeh et al.	
	14	5,986,885	11/1999	Wyland	
	15	6,236,588	05/2001	Lai et al.	
	16	6,251,706	06/2001	Paniccia	
	17	6,323,066	11/2001	Lai et al.	
	18	6,414,385	07/2002	Huang et al.	
	19	6,462,405	10/2002	Lai et al.	
	20	6,525,421	10/2002	Chia et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code*Number-Kind Code <sup>2</sup> (if known)	Publication Date MM -YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>3</sup>

Examiner Signature		Date Considered	
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\*Examiner: Initial if reference considered, whether of not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant.

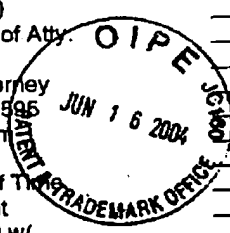
<sup>1</sup> Applicant unique citation designation number (optional). <sup>2</sup> See Kind Codes of USPTO Patent documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Abstract is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14.



Serial No. 10/643961 Attorney: SRE Mailing Date 6/15/04  
Client St. J. Our Ref. No. 50626.53  
Title Improved Ball Grid Array Package + Process for...  
Applicant(s): Chun Ho Fan et al.  
The following, due \_\_\_\_\_ in the U.S. Patent & Trademark Office, was received in  
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June M. Keating

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U.S. Application No. 10/643,961  
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Page 2 of 2

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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 1

**Complete if Known**

Application Number 10/643,961

Filing Date August 20, 2003

First Named Inventor Chun Ho FAN

Art Unit 2812

Examiner Name

Attorney Docket Number 50626.53

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code 2(if known)	Publication Date MM -YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	6,631,078	10/2003	ALCOE et al.	
	2	6,037,658	03/2000	BRODSKY et al.	
	3	2002/0005578	01/2002	KODAMA et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code*Number-Kind Code 2(if known)	Publication Date MM -YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T*
	4	DE 100 15 962 (full English translation)	10/2001	GERMANY		

Examiner Signature	Date Considered
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<sup>1</sup> Applicant unique citation designation number (optional). <sup>2</sup> See Kind Codes of USPTO Patent documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Abstract is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14.